

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-12-30 17:06:51
 Date of Next Testing: 2029-12-29 17:06:51
 Product Name: (R)-(-)-2,2-Dimethyl-1,3-dioxolan-4-ylmethyl p-Toluenesulfonate
 CAS Number: 23788-74-1
 Specifications & Purity: $\geq 98\%$ (GC)
 Lot #: L2530457
 SKU #: R160924
 Version: 1
 Analysis #: 039185
 Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	99.24 %
Specific Rotation [α] ₂₀ /D(c=2 in DMF)	-8.5 ~ -7.5 (°)	-7.51 °
Proton NMR spectrum	Conforms to structure	Conforms to Structure
Appearance (R160924)	White or Colorless to Yellow powder to lump to clear liquid	White or Colorless to Yellow powder to lump to clear liquid



John Su
QA & QC Manager